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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/805,395	03/13/2001	Harold E.A. Hansen II	16312-P001C1	7984

7590 10/05/2004

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EXAMINER

CHOW, MING

ART UNIT PAPER NUMBER

2645

DATE MAILED: 10/05/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/805,395

Applicant(s)

HANSEN ET AL.

Examiner

Ming Chow

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 24 June 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-3,6,12,18-20,24-27,58-61 and 69-84 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3,6,12,18-20,24-27,58-61 and 69-84 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

*Drawings*

1. The drawings are objected to because proper legends, for example (not intended to be a complete listing), legend for item 1402 Fig. 14 was missing. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

*Claim Rejections - 35 USC § 112*

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

The following shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

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2. Claim 71 is rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The phrase “the plurality of telecommunications devices connected to the system as telephone extensions accessible solely through the switching circuitry” is not disclosed by the specification. For example, on line 17 page 11, the specification discloses DSP for call signal processing. The DSP does not perform switching function and therefore DSP is not a switching circuitry. The call signals must be processed by the DSP to reach extensions. Therefore, the extensions are not accessible solely through the switching circuitry.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an

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international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

3. Claims 1-3, 12, 18-20, 24-27, 71-73, 84 are rejected under 35 U.S.C. 102(e) as being anticipated by Heidari (US: 5790957).

For claims 1, 2, 84, Heidari teaches on Abstract – “switching circuitry operative under control of a microcontroller”. Heidari teaches on Fig. 1, a plurality of telecommunications devices. Heidari teaches on column 3 line 35-62, column 5 line 49 to column 8 line 43, the switching circuitry connects the call to one device (digital receive, item 44 Fig. 1, or analog receive, item 46 Fig. 1) based on the information accompanying the call that the call is either an analog call or a digital call. The switching circuitry (item 60 Fig. 1) can also connects the call to the speaker (item 14 Fig. 1) based on the information accompanying the call that the call is an incoming call and the recipient is available. The switching circuitry (item 84 or 86 Fig. 1) connects the memory in accordance with information accompanying the call that the call is either inputting or outputting data from the memory. Heidari also teaches on column 1 line 60 to column 2 line 2, conversation of a call (reads on “two separate telephone extensions” of claim 84) is recorded. Heidari teaches on column 2 line 39-65, voice signal is received by a microphone and output to a speaker. Therefore, Heidari teaches two telecommunication devices both comprise a speaker and a microphone.

Heidari teaches on column 4 line 30-32, DSP under control of a microcontroller. The DSP is the claimed “voice processing circuitry”. Both the switching circuitry and the voice

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processing circuitry are controlled by the “a microcontroller” (claimed “not more than one microprocessor”).

Regarding claim 18, Heidari teaches on column 1 line 63-66 recording the incoming and outgoing speech while the person utilizing the telephone is able to maintain the conversation (reads on the claimed “off-hook state”).

Regarding claim 19, Heidari teaches on column 1 line 62-66 pushing a key (reads on claimed “manually pressing a button”) to record the speech.

Regarding claim 20, all rejections as stated in claims 1, 19 above apply.

Heidari teaches on column 6 line 3-8, item 74 Fig. 1 vocoder (claimed “recording buffer”).

Regarding claims 24, 25, Heidari teaches on item 14 Fig. 1 speaker (claimed “circuitry for listening to a voice signal”).

Heidari teaches on column 1 line 62-66 pushing a key (claimed “circuitry for activating”) to record the speech.

Heidari teaches on item 76 memory (claimed “circuitry for storing the recorded voice signal”).

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Regarding claim 26, Heidari teaches on column 5 line 49-51 the voice signal from a distant telephone (reads on “a caller”).

Regarding claim 73, Heidari teaches on column 11 line 63-67, column 12 line 26-33 DTMF tone about the call is for forwarding, reversing, or playing messages.

Regarding claims 3, 70, all rejections as stated in claim 1 above apply.

Regarding “the switching circuitry further comprises a digital cross-point matrix”, Heidari teaches on items 60, 64, 66, 68 of Fig. 1, switching circuitry comprises a digital cross-point matrix.

Regarding claim 12, all rejections as stated in claim 1 above apply.

Regarding “the signal processing circuitry further includes a DTMF receiver”, Heidari teaches on item 26 Fig. 1 DSP, item 88 Fig. 1 decoder for detection of DTMF tones. The combination of the DSP and the decoder is the claimed “signal processing circuitry”.

Regarding claims 27, 71, all rejections as stated in claims 1, 24, 25, 26 above apply.

Regarding “the plurality of telecommunications devices connected to the system as telephone extensions accessible solely through the switching circuitry”, see Fig. 1.

Regarding claim 72, all rejections as stated in claims 1 and 18 above apply.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 74, 77 are rejected under 35 U.S.C. 103(a) as being unpatentable over Heidari as applied to claim 1 above, and in view of Smith (US: 6597924).

Regarding claims, 74, Heidari failed to teach “the call.....trunk line”. However, Smith teaches on Fig. 1 and Fig. 2 a mobile telephone interfaces with central office trunk via cellular switch’s CO trunk interface.

It would have been obvious to one skilled at the time the invention was made to modify Heidari to have the “the call.....trunk line” as taught by Smith such that the modified system of Heidari would be able to support the call received from a central office trunk line to the system users.

Regarding claim 77, rejections as stated in claims 27, 71, 74 above apply.

5. Claims 6, 58-61, 69, 75, 76, 79, 81, 82 are rejected under 35 U.S.C. 103(a) as being unpatentable over Heidari, and in view of Alfred (US: 6393275).



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For claims 6, 58, 61, 69, 79, 81, all rejections as stated in claim 1 above apply.

Heidari failed to teach “connects the incoming call to a telecommunications device coupled to the system from among a plurality of telecommunications devices connected as telephone extensions”. However, Alfred teaches on Abstract and column 1 line 40-52 a plurality of cellular phones share with one number. These cellular phones serve as a parent and extension relationship by using one telephone number. The caller selects a specific extension cellular phone for the call connection.

It would have been obvious to one skilled at the time the invention was made to modify Heidari to have the “connects the incoming call to a telecommunications device coupled to the system from among a plurality of telecommunications devices connected as telephone extensions” as taught by Alfred such that the modified system of Heidari would be able to support the connecting the incoming call to a device among a plurality of devices to the system users.

Regarding claim 59, Heidari teaches on column 1 line 62-66 pushing a key (claimed “circuitry for activating”) to record the speech.

Regarding claim 60, Heidari teaches on column 5 line 49-51 the voice signal from a distant telephone (reads on “a caller”).

Regarding claim 82, Heidari teaches on column 11 line 63-67, column 12 line 26-33 DTMF tone about the call is for forwarding, reversing, or playing messages.

Regarding claim 75, Heidari in view of Alfred as stated in claim 6 failed to teach “the call.....is directed”. However, Alfred teaches on column 7 line 31 to column 8 line 13 a call from an extension (claimed “external to the system”) to another extension by pressing the numbers on the cellular phone (reads on claimed “DTMF tones”).

It would have been obvious to one skilled at the time the invention was made to modify Heidari to have the “the call.....is directed” as taught by Alfred such that the modified system of Heidari would be able to support the connecting the call by DTMF information to the system users.

Regarding claim 76, rejections as stated in claims 6, 58, 61, 69, 79, 81 above apply.

Heidari teaches on column 11 line 50 to column 12 line 34, the decoder detects a call-back number (reads on claimed “device identified by the DTMF tones”). The transmission of dictation is established via the switch to the distant telephone.

6. Claims 78, 80 are rejected under 35 U.S.C. 103(a) as being unpatentable over Heidari as applied to claim 1 above, and in view of Alfred, Smith (US: 6597924). Heidari in view of Alfred as stated in claim 58 above failed to teach “the external.....trunk line”. However, Smith teaches on Fig. 1 and Fig. 2 a mobile telephone interfaces with central office trunk via cellular switch’s CO trunk interface. It would have been obvious to one skilled at the time the invention was made to modify Heidari, Alfred to have the “the external.....trunk line” as taught by Smith such that

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the modified system of Heidari, Alfred would be able to support the call received from a central office trunk line to the system users.

7. Claim 83 is rejected under 35 U.S.C. 103(a) as being unpatentable over Heidari as applied to claim 1 above, and in view of Alfred (US: 6393275), Smith (US: 6597924).

Regarding “a single.....switching circuitry.....microprocessor”, rejections as stated in claim 1 above apply.

Heidari failed to teach “a trunk.....trunk circuitry”. However, rejection as stated in claim 74 above apply.

Heidari failed to teach “a plurality of telephone extensions.....of the telephone extensions”, rejections as stated in claim 58 above apply.

It would have been obvious to one skilled at the time the invention was made to modify Heidari to have the “a trunk.....trunk circuitry”, “a plurality of telephone extensions.....of the telephone extensions” as taught by Smith, Alfred such that the modified system of Heidari would be able to support the central office trunk line and telephone extensions to the system users.

### ***Response to Arguments***

8. Applicant's arguments filed on 6/24/04 have been fully considered but they are not persuasive.

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- i) Applicant argues, on page 13, regarding objections to the drawings. The drawings were objected to for missing legends but not for missing labels.
- ii) Applicant argues, on page 14, regarding telecommunication devices claimed in claim 1. Every device in a telecommunication network is indeed a telecommunication device.
- iii) Applicant argues, on page 15, regarding cross-point matrix claimed in claim 3. Applicant refers arguments stated on page 13 of previous amendment. However, Applicant is respectfully reminded that Newton's Telecom Dictionary does not define "cross-point matrix". Newton's Telecom Dictionary does define "crosspoint" as "a single element in an array of elements that comprise a switch". The Newton's Telecom Dictionary also defines "matrix" as "A switch. A device for moving calls from one input to the desired output". Therefore, items 60, 64, 66, 68 of Fig. 1 of Heidari exactly meet the definition.
- iv) Applicant argues, on page 16, regarding claim 73. Applicant's argument has nothing to do with the claimed limitation.
- v) Applicant argues, on page 17, regarding claims 6, 58-61, 69, 75, 76, 79, 81, 82. The telephone extensions taught by Alfred serve as calling parties. The telephone taught by Heidari serves as a called party. Therefore, the modified system of Heidari in view of Alfred meets the claimed "switching circuitry connects incoming call to a telecommunication device (of Heidari) from among a plurality of telecommunication devices extensions (of Alfred).
- vi) Applicant argues, on page 15, regarding claim 71. Applicant's argument refers to a new amendment in claim 71. The Examiner cannot understand how a failure of addressing

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the claim language while the claim language did not exist in previous claim. However, rejections for the new amendment have been stated above in this Office Action.

- vii) Applicant argues, on page 16, regarding claim 72. The Examiner cannot understand the argument. The Applicant is respectfully reminded that the rejection was clearly stated the rejections for both claims 1 and 18 apply.
- viii) Applicant argues, on page 18, regarding claim 83. See responses to arguments regarding claim 1 above.

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

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CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

9. Any inquiry concerning this application and office action should be directed to the examiner Ming Chow whose telephone number is (703) 305-4817. The examiner can normally be reached on Monday through Friday from 8:30 am to 5 pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Fan Tsang, can be reached on (703) 305-4895. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Customer Service whose telephone number is (703) 306-0377. Any response to this action should be mailed to:

**Commissioner of Patents and Trademarks**

**Washington, D.C. 20231**

**Or faxed to Central FAX Number 703-872-9306.**

Patent Examiner

Art Unit 2645

Ming Chow



FAN TSANG  
SUPERVISORY PATENT EXAMINER  
TECHNICAL FIELD 300

